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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,024	09/30/2004	Jim Liu	10256.204-US	9897

25908 7590 02/08/2007
NOVOZYMES NORTH AMERICA, INC.
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NEW YORK, NY 10110

EXAMINER

KHAN, AMINA S

ART UNIT	PAPER NUMBER
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1751

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/565,024	LIU ET AL.	
	Examiner	Art Unit	
	Amina Khan	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/18/06 and 9/14/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 13-18 are rejected under 35 U.S.C. U.S.C. 102(b) as being anticipated by Riegels et al. (US 6,184,010).

Riegels et al. teach compositions comprising esterases and *Humicola insolens* DSM 1800 cutinases (column 5, lines 65-67 and column 6, lines 1-6).

Even though Riegels et al. does not teach treating a durable finish cellulosic material use of his composition, the two different intended uses are not distinguishable in terms of the composition, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

Accordingly, Riegels et al. anticipate the material limitations of the instant claims.

3. Claims 1-6 and 12 are rejected under 35 U.S.C. U.S.C. 102(b) as being anticipated by Brodmann et al. (US 5,873,909).

Brodmann et al. teach treating cotton fabrics with DMDHEU followed by washing with cellulase enzymes (columns 13 and 14, example 1).

Accordingly, Brodmann et al. anticipate the material limitations of the instant claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13,20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney (US 5,965,517).

Mooney teaches treating cotton fabrics (column 7, line 31) with BTCA (column 3, lines 20-23) and enzymes (column 6, lines 50-60).

Mooney does not teach all the instantly claimed embodiments in a single example.

It would have nonetheless been obvious to the skilled artisan to produce the claimed composition, as the Mooney teaches each of the claimed ingredients for treating the same fabrics. One of ordinary skill would have been motivated to select the compounds from Mooney for the same purpose absent unexpected results.

6. Claims 13-15,18-21,23,24,27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bettiol et al. (WO 99/02637).

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Bettiol et al. teach detergents comprising maleic acids, citraconates (page 10, paragraph 7) and esterases, cutinases and cellulases derived from Humicola Insolens DSM 1800 or Trichoderma (page 27, paragraph 5; page 28, paragraphs 2 and 3). Bettiol et al. teach that the prior art demonstrate cellulases treat cotton containing fabrics (page 1, paragraph 3).

Bettiol does not teach the instantly claimed components in a single example.

It would have nonetheless been obvious to the skilled artisan to produce the claimed composition, as the Bettiol teaches each of the claimed ingredients for treating the same fabrics. One of ordinary skill would have been motivated to select the compounds from Bettiol for the same purpose absent unexpected results.

7. Claims 7,10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brodmann et al. (US 5,873,909), as applied to the claims above, in view of Bettiol et al. (WO 99/02637), as applied to the claims above.

Brodmann et al. are relied upon as set forth above.

Brodmann et al. do not teach cutinases, esterases, and are silent as to the origins of the cellulases.

Bettiol et al. teach the equivalence of esterases, cutinases and cellulases derived from Humicola Insolens DSM 1800 or Trichoderma (page 27, paragraph 5; page 28, paragraphs 2 and 3) in detergents for treating cotton containing fabrics (page 1, paragraph 3).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute esterases, cutinases, or Humicola or Trichoderma cellulases for cellulases in the methods of Brodmann et al. because Bettiol et al. teach these compounds as excellent in providing cleaning performance, fabric care and sanitation benefits to cotton fabrics. One of ordinary skill in the art would have been motivated to combine the teachings of the references absent unexpected results.

8. Claims 1-4,6-9,12,13-17,20,21 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,997,584).

Anderson et al. teach treating polyester/cotton blends with laundry detergents comprising Humicola Insolens cutinase (column 23, example 2). Anderson et al. further teach adding polycarboxylates such as citraconates or maleic acids to the compositions (column 10, lines 19-54).

Anderson et al. do not teach all the instantly claimed components in a single example.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the select the instantly components of Anderson for treating the cotton containing fabrics because Anderson et al. teach the reduction in pilling provided to the fabrics by these compositions. One of ordinary skill in the art would expect the methods of Anderson et al. to behave similarly to the instant claims absent unexpected results.

Conclusion

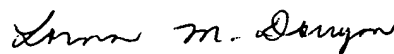
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amina Khan whose telephone number is (571) 272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Amina Khan, PhD
February 5, 2007



LORNA M. DOUYON
PRIMARY EXAMINER